



Flood Control District of Maricopa County

Flood Control Advisory Board

Notice of Meeting for May 24, 2017

NOTICE OF MEETING OF THE FLOOD CONTROL ADVISORY BOARD

Pursuant to A.R.S. 38-431.02, notice is hereby given to the general public that the Flood Control Advisory Board (FCAB) will hold a meeting open to the public on Wednesday, May 24, 2017 at 2:00 p.m., in the Adobe Conference Room of the Flood Control District located at 2801 West Durango Street in Phoenix. Matters on the agenda may be discussed in executive session for the purpose of obtaining advice thereon.

The agenda is as follows:

- 1) Call to Order
- 2) Pledge of Allegiance
- 3) Approval of the Minutes: February 22, 2017 FCAB Meetings
- 4) **Action Item** – Text amendments to the Floodplain Regulations for Maricopa County. *Staff recommends the following action:* The Flood Control Advisory Board endorse and recommend that the Board of Directors adopt text amendments to the Floodplain Regulations for Maricopa County. Presented by: Mark Frago, Planner - Senior
- 5) **Action Item** – Phase I of the Granite Reef Watershed Drainage Improvements Project (IGA FCD2017A017). *Staff recommends the following action:* The Flood Control Advisory Board endorse and recommend that the Board of Directors approve IGA FCD2017A017 for Phase I of the Granite Reef Watershed Drainage Improvements Project. Presented by: Mike Duncan, Project Manager
- 6) **Information and discussion item only.** Capital Improvement Program (CIP) Prioritization Procedure. *No formal action is required.* Presented by: Don Rerick, Planning and Project Management Division Manager
- 7) **This item is for information and discussion only.** Comments from the Chief Engineer and General Manager. *No formal action is required.* Presented by: William D. Wiley, P.E., Chief Engineer and General Manager
- 8) **This item is for information and discussion only.** Summary of Recent Actions by the Board of Directors. *No formal action is required.* Presented by: William D. Wiley, P.E., Chief Engineer and General Manager

- 9) **This item is for information and discussion only.** Other Business and Comments from the Public.
No action will be taken.

A handwritten signature in black ink, appearing to read 'W.D. Wiley', with a stylized, sweeping flourish extending to the right.

William D. Wiley, P.E.
Chief Engineer and General Manager

May 8, 2017

NOTE: *A sign language interpreter will be made available upon request with 72-hours notice. Alternative format materials or FM or Infrared Listening Devices are also available upon request with 72-hours notice. Additional reasonable accommodations will be made available to the extent possible within the time frame of the request.*

**Flood Control
Advisory Board**

WELCOME

May 24, 2017



Agenda

- Call to Order
- Pledge of Allegiance
- Approval of the 2-22-2017 FCAB Meeting Minutes
- Text Amendments – Floodplain Regulations for Maricopa County
- Phase I, Granite Reef Watershed Drainage Improvements
- Capital Improvement Program (CIP) Prioritization Procedure
- Comments from the Chief Engineer and General Manager
- Summary of Recent Actions by the Board of Directors
- Other Business and Comments from the Public





Text Amendments to the Floodplain Regulations for Maricopa County

Mark Frago, AICP, CFM

Senior Planner

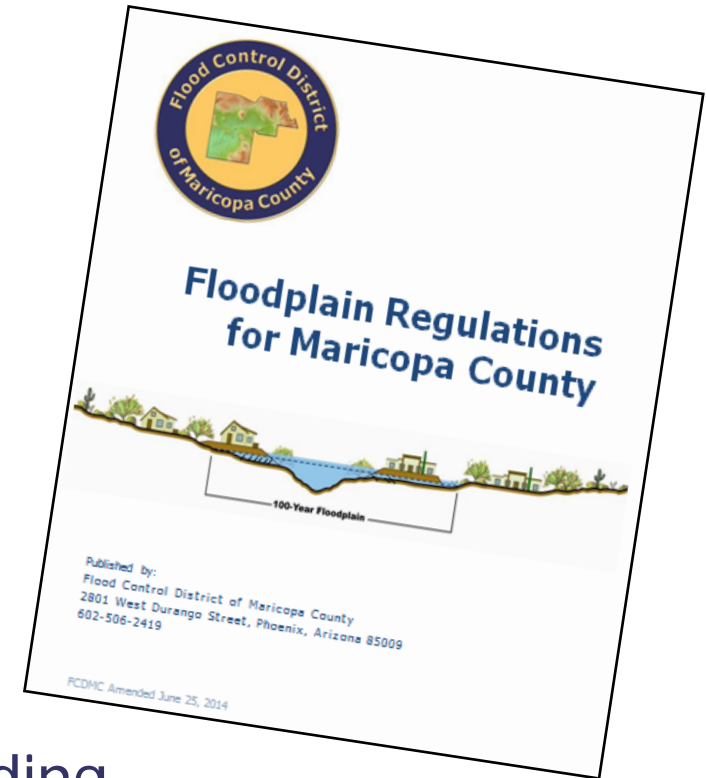
Policy, Planning & Coordination Branch

Purpose and Introduction

- To adopt text amendments to the Floodplain Regulations for Maricopa County.
- This public meeting is required by our Enhanced Regulatory Outreach Program.
- **No additional regulatory burden** as a result of these proposed text amendments.

Floodplain Regulations Update

- Changes in state statutes
- FEMA/ADWR audit requiring modifications
- Sand and Gravel taskforce changes
- Clarifications and minor wording changes



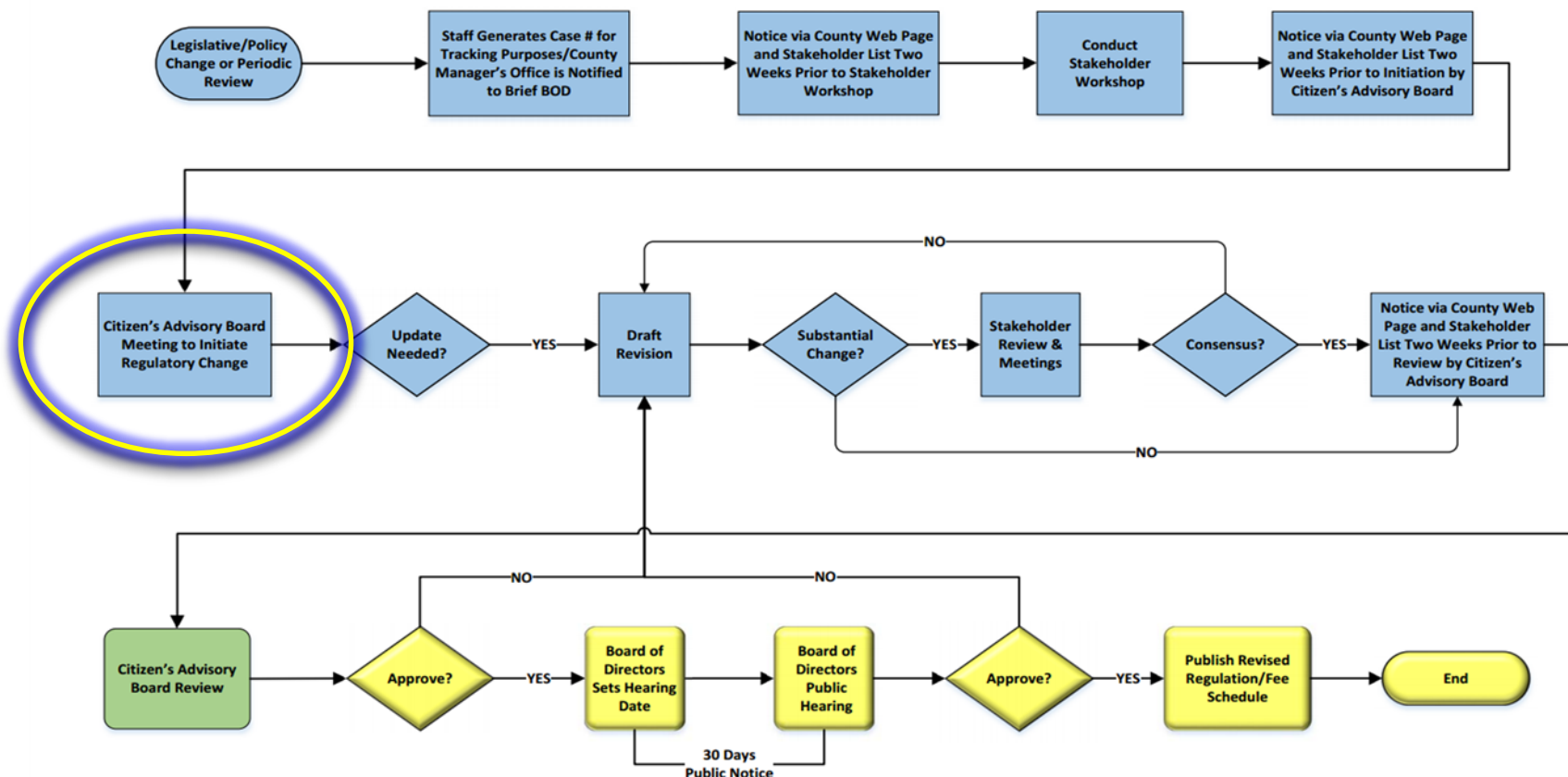
Key Changes

- Lifespan permits for Sand and Gravel
- Changes in fees to reflect modified permit structure
- Floodplain Use Permit fee reduction for modifications
- Licensing Timeframe
- Clarifications – minor wording and location changes in document



Flood Control District

Fee Schedule/Regulation Modification Procedure



Stakeholder Workshop

- Per the EROP process, a stakeholder workshop was held on April 13th 2017 and was attended by 5 stakeholders.
- Comments were discussed at the meeting. To date, no written comments have been received per that workshop.

Prior Steps

- EROP Stakeholder meeting held April 13th 2017
- Flood Stakeholder Group meeting held April 13th 2017



Next Steps

- Process comments and finalize changes to the Regulations
- 
- 2nd Public Meeting with the Flood Control Advisory Board scheduled for June 28th 2017 to approve changes for text amendments to the Floodplain Regulations for Maricopa County



Questions?



Granite Reef Watershed Drainage Improvements

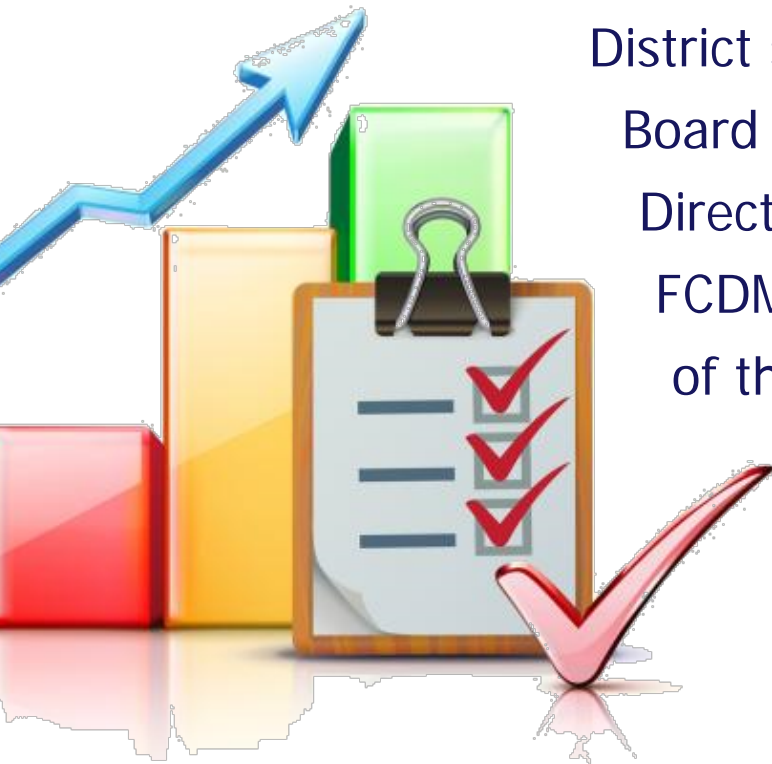
-Phase I-

*Intergovernmental Agreement
FCD 2017A017*

Mike Duncan, P.E., CFM
Project Manager

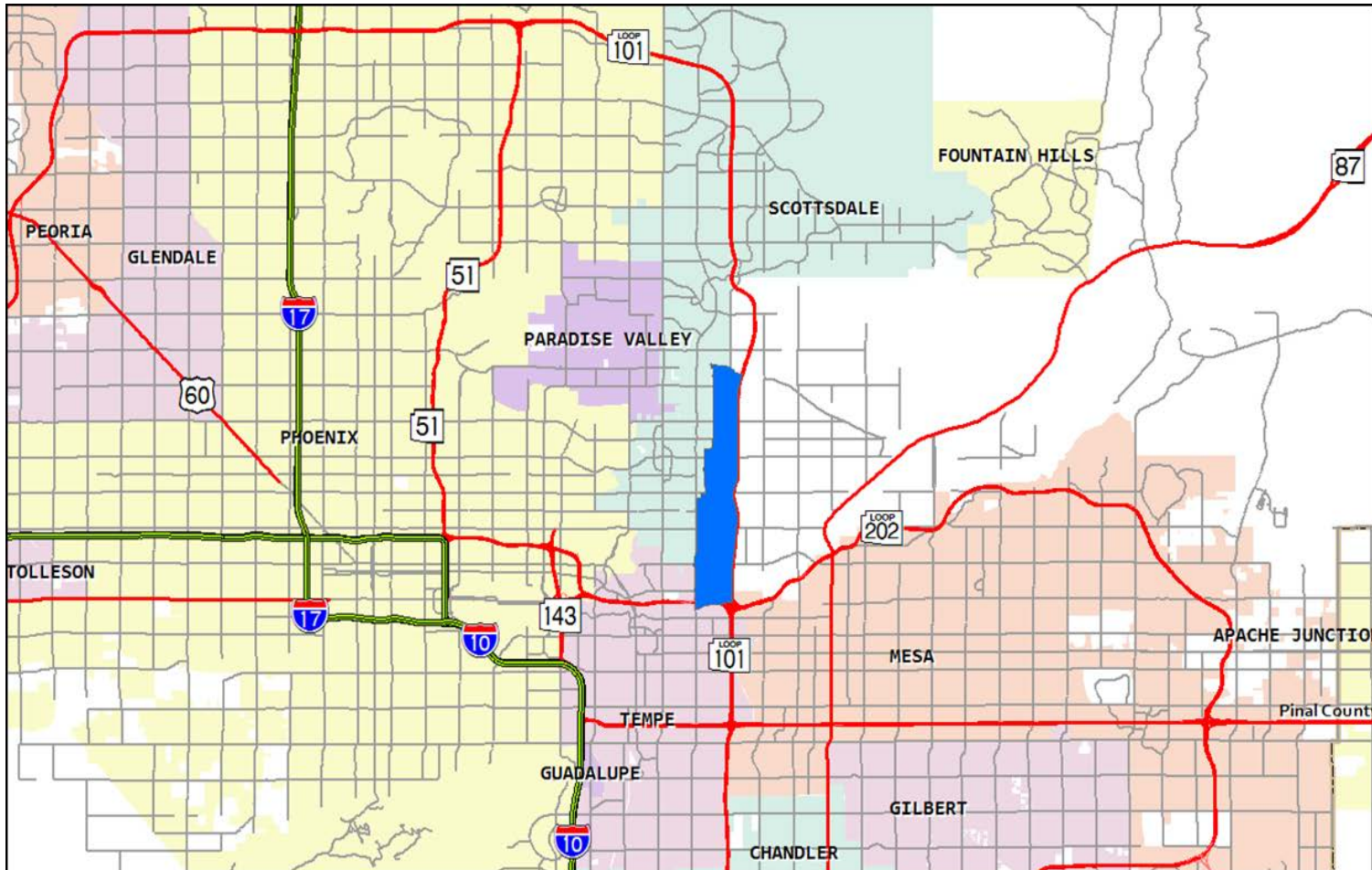
Action Item

District staff requests that the Flood Control Advisory Board endorse and recommend that the Board of Directors approve IGA FCD 2017A017 between FCDMC and the City of Scottsdale for Phase I of the Granite Reef Watershed Drainage Improvements project.



Granite Reef Watershed

(Location – southeast Scottsdale)



**100-year FEMA
Floodplain of
Granite Reef
Wash
is at the south
part of the
Watershed**

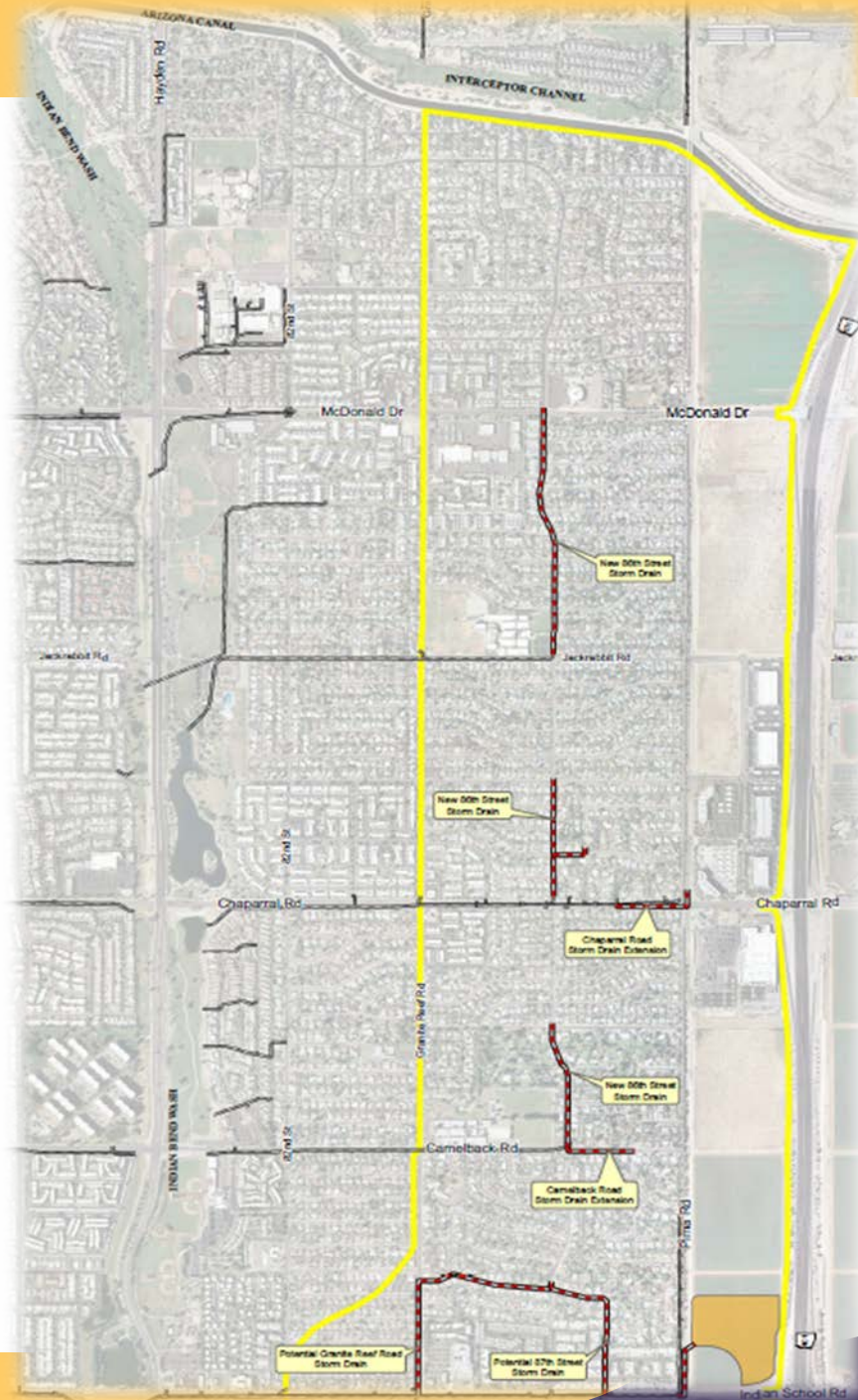
**Approximately
700 homes are
in the
floodplain**



Phase I

Arizona
Canal
at north

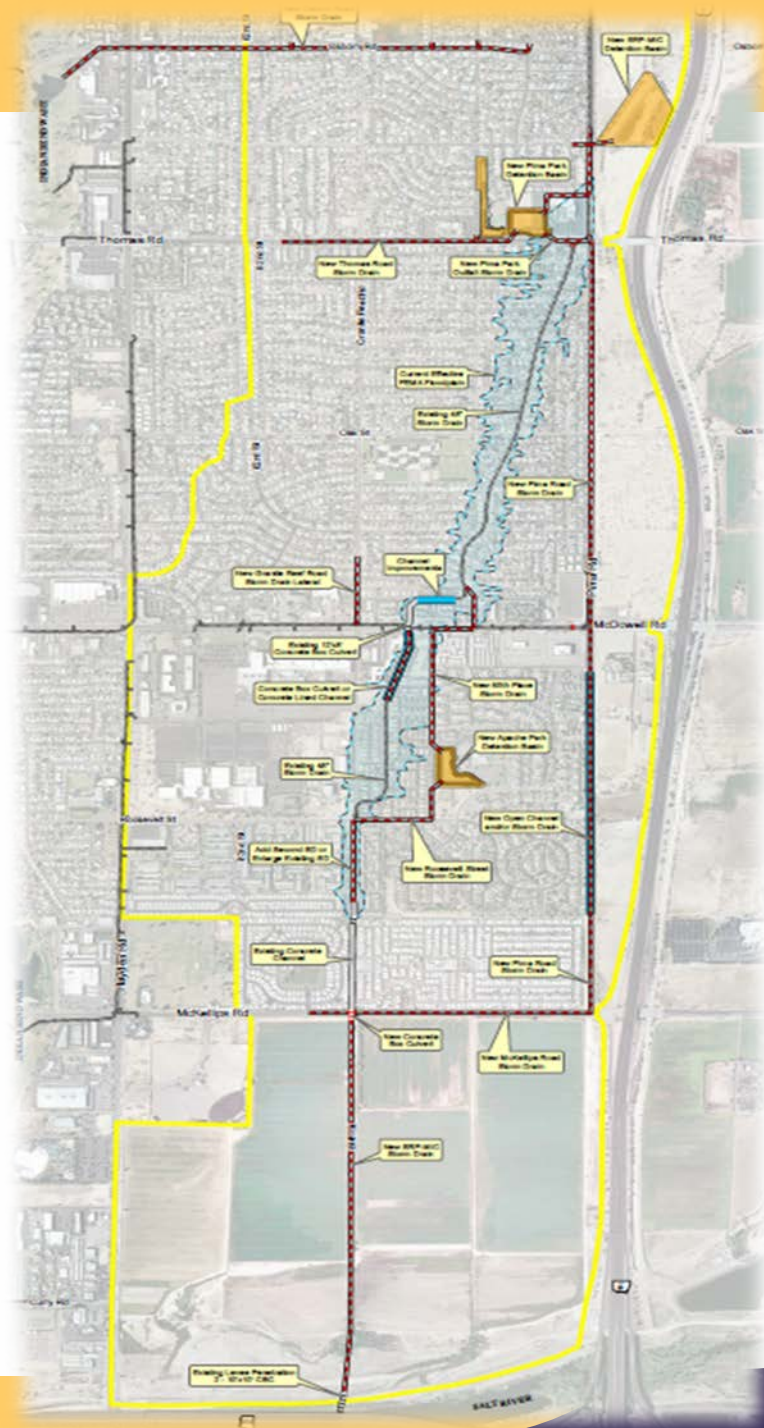
Indian
School
Road
at south



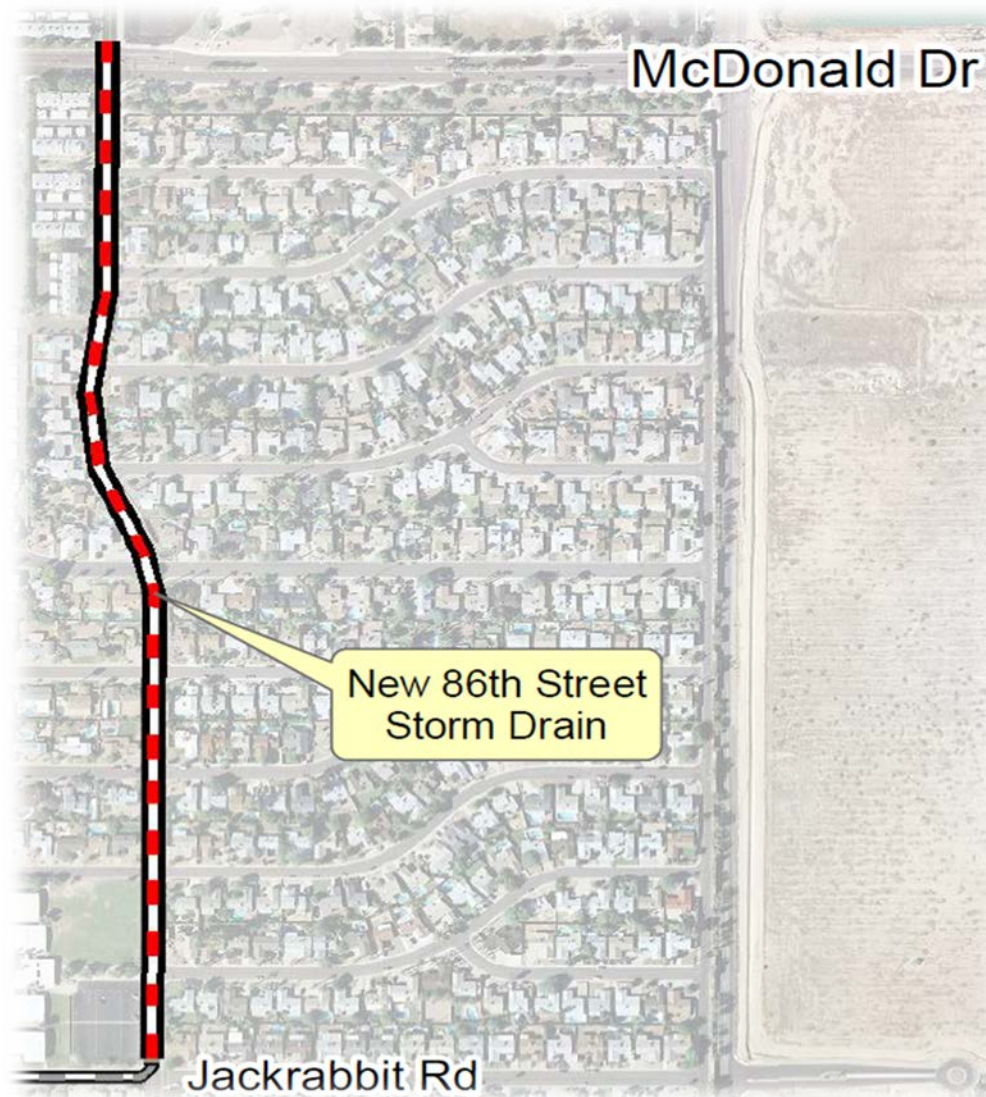
Phase II

Indian School Road at north

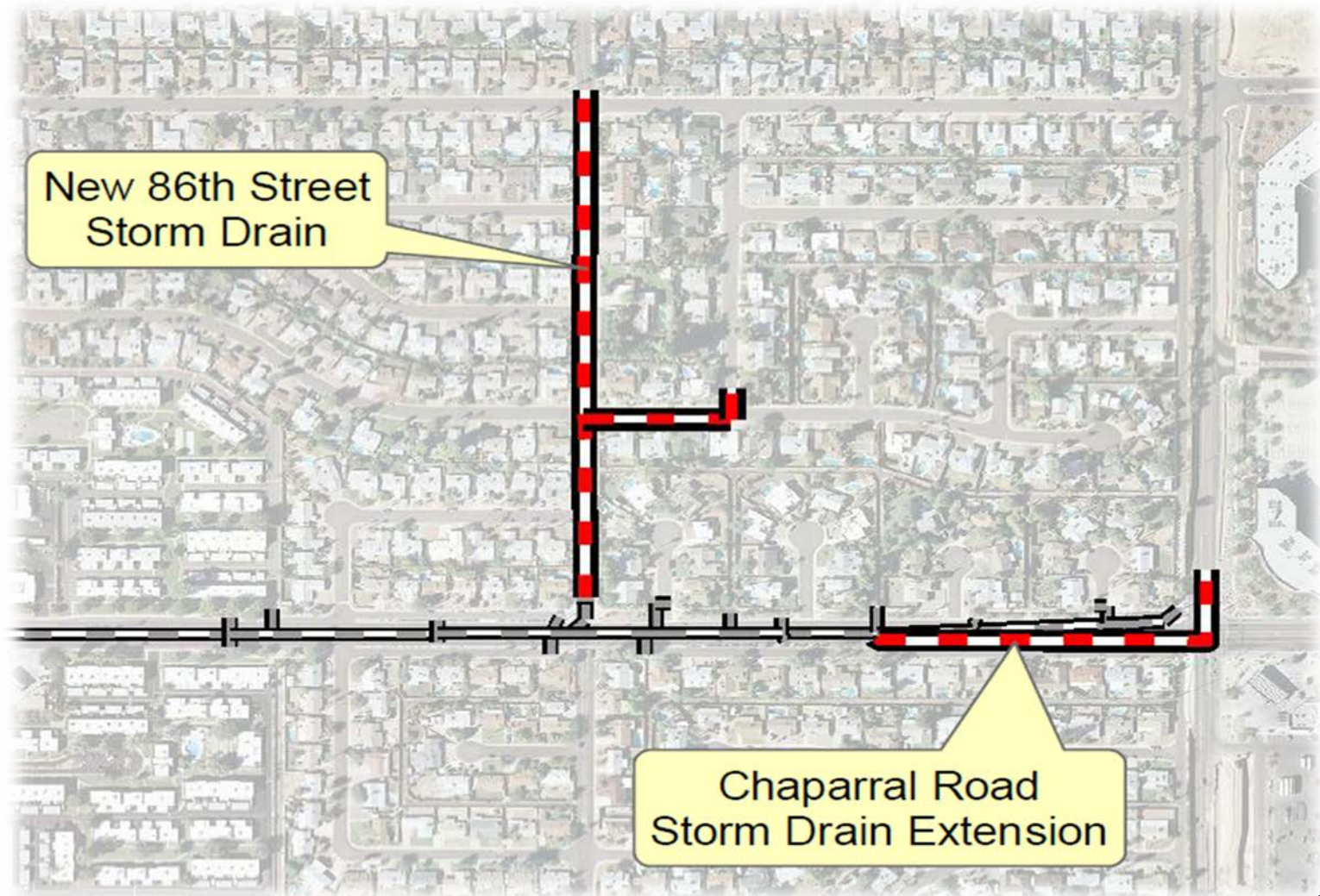
Salt River at south



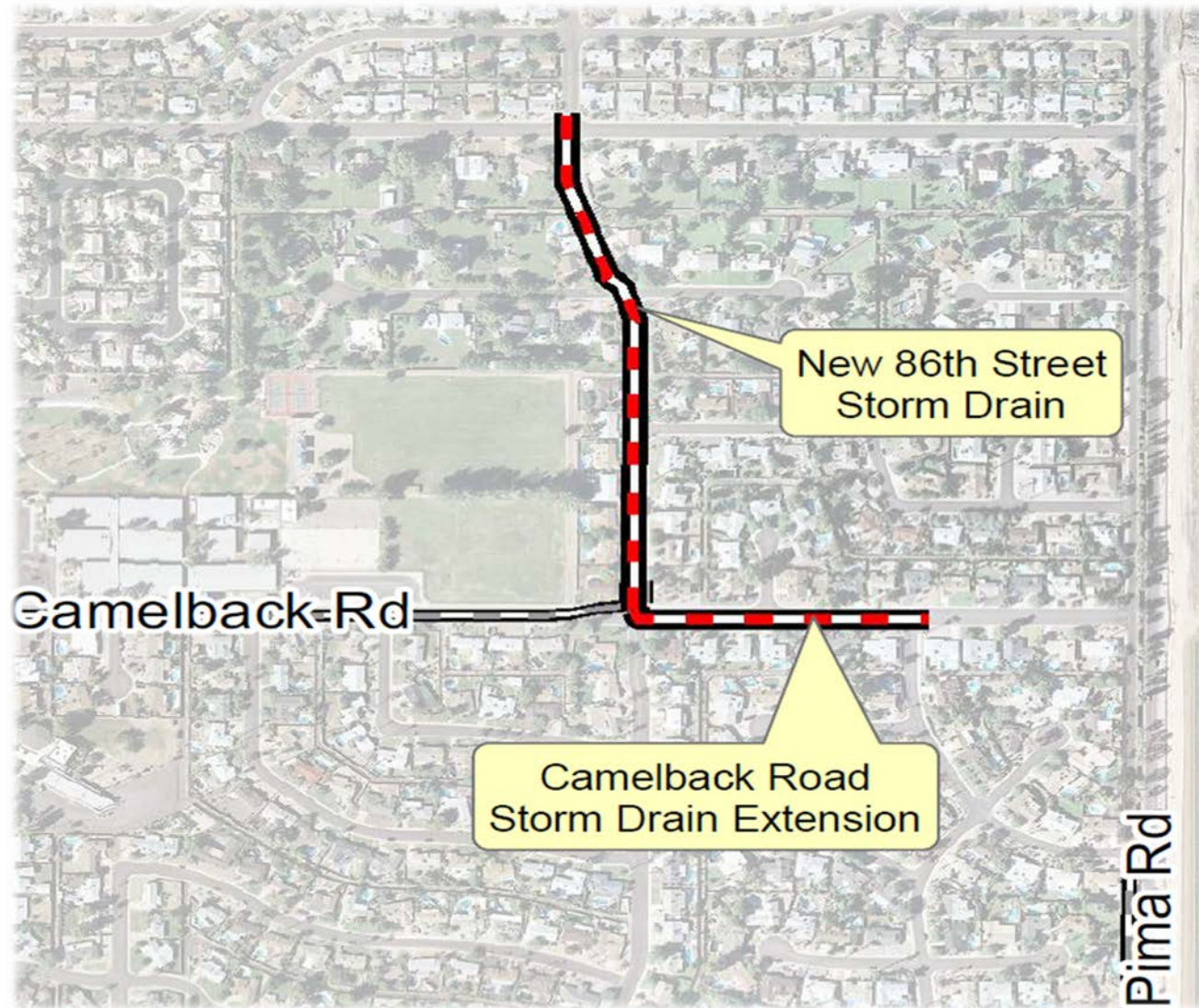
Jackrabbit Road System



Chaparral Road System



Camelback Road System



Concept for Phase I-B

Indian School Road System



Estimated Costs

\$ 4.5 M Phase I-A
\$ 2.1 M Phase I-B
\$ 6.6 M **Total for Phase I**



Partner Cost Sharing: 50/50%

\$ 3.3 M by Scottsdale
\$ 3.3 M by FCDMC

O&M will be by City of Scottsdale



Requested Action

District staff requests that the Flood Control Advisory Board endorse and recommend that the Board of Directors approve IGA FCD 2017A017 between FCDMC and the City of Scottsdale for Phase I of the Granite Reef Watershed Drainage Improvements project.

Questions





Capital Improvement Program Prioritization Procedure (CIPPP)

Don Rerick, P.E.

Planning and Project Management Division Manager

CIPPP Purpose

Primary annual mechanism for evaluating newly proposed capital projects for possible funding.

Identify and support flood control and regional drainage projects that:

- Provide long term protection to people and property
- Supports community development
- Provide opportunities for multi-use and open space

Prioritization Schedule

Mid May	Agency Notices Sent
Mid July	Agency Proposal Submittals Due
August	Submittals Reviewed by Evaluation Committee
August	Evaluation Committee Recommendations to PPM Manager & CE & GM
September	FCAB Program Budget Committee Review
September	Staff Recommendations Forwarded to Agencies
October	Staff Recommendations Presented to FCAB for Action
December	Prioritization Procedure Results Published
January	Agencies Informed
January - March	Yearly CIP Programming/Budgeting Process
March - June	Appropriate 5-Year CIP Modifications/Adjustments through OMB Review and Guidance

CIPPP Submittal Requirements

- Submittals made electronically by means of email or CD, including a signed letter of intent (LOI).
- Project submittals should clearly address the project evaluation criteria.
- Maps and similar graphic aids demonstrating prospective project elements are recommended.
- Local (non-District) master plans should be included with the submittal.

CIPP Prioritization Criteria*


1. <u>Funding Commitment & Agency Priority:</u> <ul style="list-style-type: none"> • Is project part of short or long-range CIP Program? • Does project have scheduled funding? 12	5. <u>Area Protected:</u> <ul style="list-style-type: none"> • What is the benefitted infrastructure? • What are the number of benefitted buildings and population? 25
2. <u>Flood Control/Drainage Master Plan Element:</u> <ul style="list-style-type: none"> • Is it part of existing storm-water management or drainage master plan? • What is the priority of project within the overall plan? 8	6. <u>Ancillary Benefits:</u> <ul style="list-style-type: none"> • Does the project provide a benefit needed for economic development? • Are there water conservation/recharge opportunities? • Multi-use opportunities. 12
3. <u>Flooding Threat:</u> <ul style="list-style-type: none"> • Is project intended to address existing flooding hazard? • Has documented flooding of structures occurred? 15	7. <u>Level of Partner Participation:</u> <ul style="list-style-type: none"> • Greater points given to projects with maximum external agency participation. 12
4. <u>Level of Protection:</u> <ul style="list-style-type: none"> • 10 year to 100 year. 10	8. <u>Operation and Maintenance Costs to District:</u> <ul style="list-style-type: none"> • Greater points are assigned to requests with minimal O&M costs to be borne by District. 6

Total: 100

CIP Project Prioritization Scoring Guide

FACTOR	RANGE			PEC POINTS
Funding Commitment & Agency Priority	<u>Low</u> 0	<u>Med.</u> 1-4	<u>High</u> 5-12	12
High Range: Funding is identified in the municipalities' 5-year CIP, project partner is ready to enter into an Intergovernmental Agreement, and Project is ranked 1st or 2nd among agency's submittals.				
Med. Range: Funding is likely to be identified in the municipalities' 5-year CIP and/or Project is ranked between 3rd or 4th among agency's submittals.				
Low Range: Funding is not identified in the municipalities' 5-year CIP, or Project is ranked 5th (or lower) among agency's submittals.				
Flood Control/Drainage Master Plan Element	<u>Low</u> 0-4	<u>Med.</u> 5-6	<u>High</u> 7-8	8
High Range: Project is directly recommended by a formal regional flood control/drainage master plan/study acceptable to the District.				
Med. Range: Project is directly recommended by a formal flood control/drainage master plan/study that is non-regional but examines impact across a municipality or over a significant portion of it; or, project is a modified component of a regional flooding/drainage master plan that accomplishes a portion of the master plan's intent.				
Low Range: Project is identified by a localized flooding/drainage study that does not address overall system effectiveness; or the need for the submitted project is not identified by any flooding/drainage study.				
Flooding Threat	<u>Low</u> 0-5	<u>Med.</u> 6-12	<u>High</u> 13-15	15
High Range: Project mitigates residential/commercial flooding identified by a delineated floodplain where development regulations are insufficient or where development occurred prior to floodplain delineation; or mitigates flooding in a non-delineated flood hazard area subjected to frequent historic flooding.				
Med. Range: Project mitigates residential/commercial flooding identified by a delineated floodplain (or mitigates flooding in a non-delineated flood hazard area subjected to frequent historic flooding) where development regulations addressed (or will address) the primary flooding threat, but where some flooding threat remains.				
Low Range: Project mitigates a minor or questionable flooding threat to structures; or only protects roadways. Fewer points will be awarded to those projects that are intended to resolve flooding issues caused by inadequate or improper regulation by the requesting agency.				
Level of Protection	<u><10 yr</u> 0	<u>10-50 yr</u> 3-7	<u>≥50 yr</u> 8-10	10
>50 yr: Project generates a level of protection from events more severe than a 50-year storm (where that level of protection does not currently exist).				
10-50 yr: Project generates a level of protection from events between a 10-year and 50-year level of severity (where that level of protection does not currently exist).				
>10 yr: Project generates a level of protection from events less than a 10-year level of severity - the District typically would not participate in projects of this scope.				
Area Protected	<u>Low</u> 0-8	<u>Med.</u> 9-16	<u>High</u> 17-25	25
High Range: Project protects a large area of highly-populated land with significant infrastructure, or provides a particularly cost effective solution for a smaller area of highly-populated land with significant infrastructure				
Medium Range: Project protects a large area of lightly-populated land, or a smaller area of highly-populated land, or provides a regional facility for multiple large-scale future developments				
Low Range: Project does not meet the above criteria				
Ancillary Benefits	<u>Low</u> 0-4	<u>Med.</u> 5-8	<u>High</u> 9-12	12
High Range: Project provides a significant recreational amenity, alleviates major roadway flooding, substantially benefits the environment, provides some other major quality of life improvement.				
Medium Range: Project provides ancillary benefits in a less substantial manner than a "high range" project.				
Low Range: Project does not provide ancillary benefits, or provides insignificant ancillary benefits.				
Level of Partner(s) Participation	<u><50%</u> 0-4	<u>50%</u> 8	<u>≥50%</u> 12	12
> 50%: Non-District partners will contribute greater than 50% of the project's estimated total cost.				
50%: Non-District partners will contribute 50% of the project's estimated total cost.				
< 50%: Non-District partners will contribute less than 50% of the project's estimated total cost.				
O&M Costs to the District	<u>High</u> 0	<u>Low</u> 1-5	<u>None</u> 6	6
None: The proposed project will create no additional O&M costs expected to be borne by the District.				
Low: The proposed project will create minor additional O&M costs expected to be borne by the District.				
High: The proposed project will create significant additional O&M costs expected to be borne by the District.				
TOTAL				100

LOI and Map Example



Flood Control Capital Project Letter of Intent

Project Name: Pinnacle Peak & 67th Avenue Drainage Improvements

Name of Submitting Agency: City of Peoria

1. General

A. Project Area

The areas bounded by 67th Avenue on the east, Pinnacle Peak Road on the south, New River on the west and Hatfield Road on the north. Section 12; T.4N.; R.1E.

B. Summary Project Description

Construct 100-Year storm drain system per the recommendation from the Glendale-Peoria ADMP and Design Concept Report for 67th Avenue.

C. Estimated Project Cost \$14,140,000.00

2. Proposed Lead Agency by Task (For each task, indicate "District", City/Agency name, or "Not Applicable")

A. Design District

B. Rights-of-Way Acquisition Peoria & District

C. Construction District

D. Operations and Maintenance Peoria

3. Proposed Cost Share

	District	City/Agency	Other	Total
A. Percentage	50.00%	50.00%	0.00%	100.00%
B. Dollars	\$7,070,000.00	\$7,070,000.00		\$14,140,000.00

4. Estimated Availability of City/Agency Funding (Dollars)

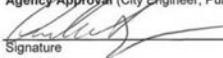
FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	Later FYs
	\$7,070,000.00	\$7,070,000.00			

5. Master Plan/Study Applicable to Submitted Project

A. Title (if applicable) Glendale-Peoria Area Drainage Master Plan, 2001 & 67th Av. DCR, April 2007

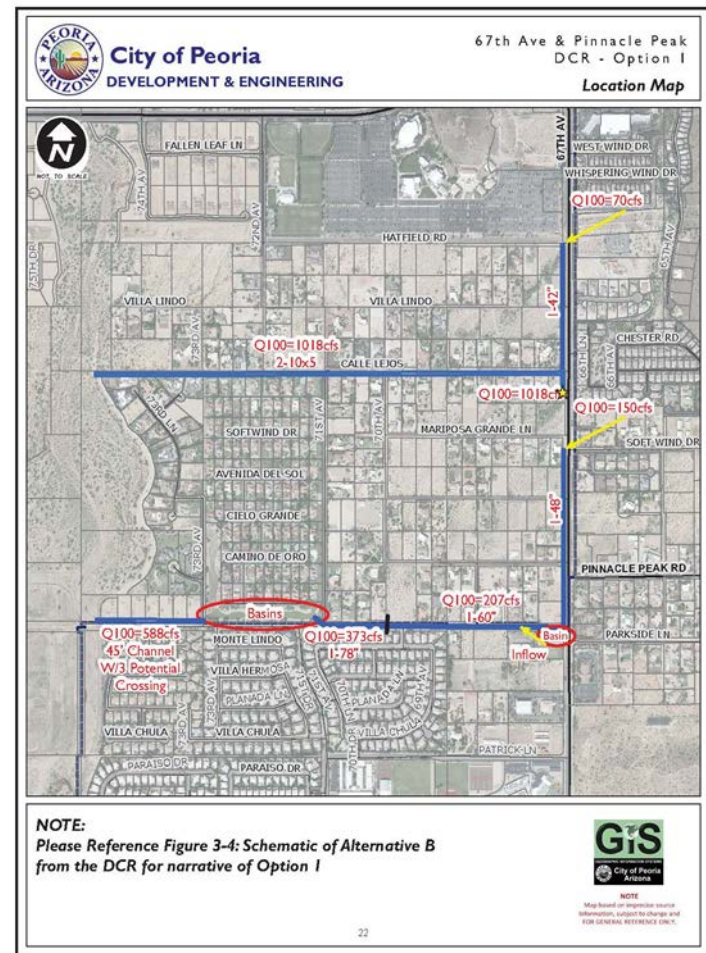
B. Adopted by City/Agency? ☒ Adopted ☐ Not Adopted ☐ Pending ☐ Not Applicable

6. Agency Approval (City Engineer, Public Works Director, or Agency Manager)

 07/12/2016
 Signature Date
 Andrew Granger Development and Engineering Director
 Printed Name Title

Submittals must adhere to the CIP Prioritization Procedure guidelines - in particular: (1) Explicitly and quantitatively address the evaluation criteria identified by the CIP Prioritization Procedure, giving particular attention to quantifying flood control benefits; (2) include maps and other graphic attachments demonstrating the conceptual components of the project; (3) provide eight copies of each project submittal (accompanied by corresponding signed letters of intent); (4) if a non-District study generated the project, provide one copy of the study.

2801 West Durango Street Phoenix, Arizona 85009 Phone: 602-506-1501 Fax: 602-506-4601



CIPPP Project Submittals

Fiscal Year	# Submittals	# Recommended
2007	25	9
2008	19	7
2009	12	5
2010	19	8
2011	16	4
2012	7	3
2013	11	4
2014	6	1
2015	9	3
2016	6	2
2017	11	2
2018	1	1
Total	142	49

Backlog and Active Projects Recommended through the CIPPP

Project	District	City	Project Cost
Central Chandler Storm Drain Improvements	1	Chandler	\$2,800,000
Chandler Heights Basin	1	Gilbert	\$8,500,000
East Maricopa Floodway Low Flow Channel	1	FCD	\$2,300,000
Highline Western Canal Storm Drain	1	Tempe	\$3,980,000
Loma Vista Corridor Drainage Improvement Project	1	Tempe	\$2,670,000
Rittenhouse Basin	1	Gilbert	\$1,990,000
Rittenhouse Road FRS	1	FCD	\$8,200,000
Berneil Channel Modifications	2	Paradise Valley	\$5,500,000
Ellsworth Rd. & McKellips Rd. Drainage System	2	Mesa	\$4,800,000
Granite Reef Wash Drainage Improvements	2	Scottsdale	\$21,375,000
McCormick Stillman Railroad Park/Lincoln Drive Drainage Improvements	2	Scottsdale	\$6,703,400
Oak St. Detention Basin and Storm Drain	2	Mesa	\$3,480,000
Pecos North and South Detention Basins	2	Mesa	\$15,500,000
Pecos Road Channel	2	Mesa	\$13,620,000
Camelback Road Storm Drain (Arcadia Phase III)	3	Phoenix	\$5,310,000
Cave Buttes Dam Modifications Phase 1	3	Phoenix & USACE	\$5,790,000
Cave Buttes Dam Modifications Phase 2	3	Phoenix & USACE	\$4,720,000
Skunk Creek Levees at CAP	3	FCD	\$8,900,000
Agua Fria Boulevard Scour Protection Grade Control Structure	4	MCDOT	\$2,000,000
Agua Fria River Levee Safety Improvements	4	Avondale	\$440,000
AT&SF Channel	4	MCDOT	\$6,377,000
Buckeye FRS No.1 Rehabilitation Phase 1	4	FCD	\$5,490,000
Buckeye FRS No.1 Rehabilitation Phase 2	4	FCD	\$23,865,000
Bullard Wash (Phase II)	4	Goodyear	\$12,500,000
Downtown Buckeye Regional Basin & Storm Drain	4	Buckeye	\$3,778,900
Happy Valley Channel	4	Surprise	\$2,260,000
Luke Air Force Base Flood Mitigation Improvements	4	LAFB	\$5,975,000
McMicken Dam Outfall Channel	4	FCD	\$16,400,000
McMicken Dam Rehabilitation Phases 1 & 2	4	FCD	\$23,446,000
McMicken Dam Rehabilitation Phases 3 & 4	4	FCD	\$34,078,000
McMicken Dam Rehabilitation Phases 5, 6 & 7	4	FCD	\$29,696,000
New River Dam Outlet Improvements	4		\$900,000
Northern Parkway Drainage Improvements - Phase II (Dysart Rd. to 111th Ave.)	4	MCDOT	\$7,248,550
Oglesby Drainage System	4	Buckeye	\$37,400,000
Palo Verde Drainage System	4	Buckeye	\$93,700,000
Rooks Drainage System	4	Buckeye	\$45,500,000
Skunk Creek Channel at Pinnacle Peak Rd. and 35th Ave.	4	Phoenix	\$8,500,000
Skyline Wash Basin and Outlet	4	Buckeye	\$6,800,000
SR-85/Oglesby Outfall Channel	4	ADOT/FCD	\$14,000,000
Union Hills Drainage Improvements Phases I & 2	4	Peoria & Surprise	\$8,010,000
Union Hills Drainage Improvements Phase 3	4	Peoria & Surprise	\$3,845,000
Waddell Rd. Drainage Improvements	4	Surprise	\$772,000
Watson Drainage System	4	Buckeye	\$40,788,000
White Tanks FRS No.4 Outlet	4	FCD	\$8,035,000
White Tanks FRS No.4 Rehabilitation Phase 2	4	FCD	\$23,072,000
20th Ave. and Turney Ave. Detention Basin	5	Phoenix	\$13,000,000
27th Ave. & South Mountain Ave. Basin	5	Phoenix	\$5,236,000
27th Avenue and Dobbins Road Detention Basin Project	5	Phoenix	\$6,700,000
Bethany Home Rd. Storm Drain (59th Ave. to 79th Ave.)	5	Glendale	\$4,070,000
Bethany Home Road Storm Drain (51st Ave. to 59th Ave.)	5	Glendale	\$3,150,000
Circle K Park Detention Basin and Storm Drain	5	Phoenix	\$16,800,000
Downtown Phoenix Drainage System Improvements	5	Phoenix	\$300,000
DRCC (107th Ave. to Agua Fria)	5	Avondale	\$6,320,000
DRCC (15th Ave. to 107th Ave.)	5	Phoenix	\$11,365,000
Harquahala FRS Erosion Hazard Reduction	5	FCD	\$2,000,000
Jefferson St. and I-17 Storm Drain	5	Phoenix	\$3,100,000
Saddleback FRS Modifications	5	FCD	\$20,000,000
Sand Tank Wash Flood Control Improvements	5	Gila Bend	\$11,707,000
South Gila Bend Drainage Improvements	5	Gila Bend	\$283,000
South Phoenix/Laveen Drainage Improvement Project	5	Phoenix	\$11,300,000
Van Buren St. Channel (99th Ave. to Agua Fria River)	5	Avondale	\$9,347,000
Meridian North and South Channels	1, 2	Mesa	\$2,400,000
Powerline FRS Replacement & Decommissioning (Channel)	1, 2	FCD	\$30,762,500
Vineyard FRS Rehabilitation	1, 2	FCD	\$58,118,000
Guadalupe FRS Modifications	1, 5		\$3,000,000
Floodprone Property Acquisition Program	1, 2, 3, 4, 5		\$0
Land Rights Acquisition Program	1, 2, 3, 4, 5		\$1,000,000
Maintenance Road Paving (Dust Abatement) Program	1, 2, 3, 4, 5		\$1,500,000
Small Projects Assistance Program	1, 2, 3, 4, 5		\$30,000,000

\$842,471,350

FAQ's

Q: How do new projects recommended in one fiscal year CIPPP fit in with other previously recommended projects?

A: Newly recommended projects sit in the queue with other previously recommended projects until such time as the submitting agency desires the project to move forward. The CIPPP process itself does not ensure that a project will move forward. A project can move forward when funding is available and the FCD and submitting agency sign an IGA.

Q: Will the 5-Year CIP be revised for new recommended project submittals with a high point score?

A: The 5-Year CIP is updated annually and can include new projects that have been recommended subject to funding availability and a signed IGA for the project.

Q: Is lack of funding by a submitting agency a project killer regardless of total points scored?

A: No, the project simply does not move forward until such time as funding is available and an IGA has been signed.

Questions





Comments from the Chief Engineer and General Manager





Summary of Recent Actions By the Board of Directors



Denny Barney
District 1
- **Chairman** -



Steve Chucri
District 2



Bill Gates
District 3



Clint L. Hickman
District 4



Steve Gallardo
District 5

Other Business and Comments from the Public

